

IN THE CLAIMS

1. (Previously Presented) A method comprising:

generating a first body of data being sufficient to permit generation of a viewable video sequence of lesser quality than is represented by a source video sequence;

generating a second body of data being sufficient to enhance the quality of the viewable video sequence generated from the first body of data, the second body of data being generated by subtracting a reconstructed body of data from a subsection of the source video sequence, wherein the reconstructed body of data is selected from a group of at least two separate reconstructed bodies of data, and wherein the second body of data includes an enhancement layer that captures differences between the viewable video sequence and the source video sequence; and

predicting a subsection of the enhancement layer according to a prediction mode of a plurality of prediction modes, the plurality of prediction modes including prediction using the source video sequence and a combination of a previous enhancement frame and the first body of data.

2. (Original) The method of claim 1, wherein the group of at least two separate reconstructed bodies of data is selected from a reconstructed first body of data sufficient to permit generation of the viewable video sequence of lesser quality than is represented by the source video sequence, a reconstructed second body of data sufficient to enhance the quality of the viewable video sequence generated from the first body of data, or a combination of the reconstructed first and second bodies of data.

3. (Original) The method of claim 2, further comprising:

prior to generating the second body of data generated by subtracting the reconstructed body of data from the subsection of the source video sequence, spatially reconstructing and clipping the reconstructed first body of data, and spatially reconstructing and clipping the reconstructed second body of data.

4. (Original) The method of claim 2, wherein the second body of data is generated by subtracting a reconstructed body of data from a macroblock of the source video sequence.

5. (Original) The method of claim 2, further comprising:
comparing the at least two separate reconstructed bodies of data to the source video sequence to adaptively select from the reconstructed first body of data, the reconstructed second body of data, or the combination of the reconstructed first and second bodies of data.

6. (Original) The method of claim 2, wherein the selection of the reconstructed body of data is indicated in a syntax of a bit-stream transmitted from an encoder.

7. (Original) The method of claim 2, wherein a first set of motion vectors are used to generate the first body of data and the first set of motion vectors are used to generate the second body of data.

8. (Original) The method of claim 2, wherein the first body of data and the second body of data are generated by a single hardware component.

9. (Previously Presented) An article comprising a computer-readable medium which stores computer-executable instructions, the instructions causing a computer to:

generate a first body of data being sufficient to permit generation of a viewable video sequence of lesser quality than is represented by a source video sequence;

generate a second body of data being sufficient to enhance the quality of the viewable video sequence generated from the first body of data, the second body of data being generated by subtracting a reconstructed body of data from a subsection of the source video sequence, wherein the reconstructed body of data is selected from a group of at least two separate reconstructed bodies of data, and wherein the second body of data includes an enhancement layer that captures differences between the viewable video sequence and the source video sequence; and

predict a subsection of the enhancement layer according to a prediction mode of a plurality of prediction modes, the plurality of prediction modes including prediction using the

source video sequence and a combination of a previous enhancement frame and the first body of data.

10. (Original) The article comprising a computer-readable medium of claim 9, wherein the group of at least two separate reconstructed bodies of data is selected from a reconstructed first body of data sufficient to permit generation of the viewable video sequence of lesser quality than is represented by the source video sequence, a reconstructed second body of data sufficient to enhance the quality of the viewable video sequence generated from the first body of data, or a combination of the reconstructed first and second bodies of data.

11. (Original) The article comprising a computer-readable medium of claim 10, further including additional instructions causing the computer to:

prior to generating the second body of data generated by subtracting the reconstructed body of data from the subsection of the source video sequence, spatially reconstruct and clip the reconstructed first body of data, and spatially reconstruct and clip the reconstructed second body of data.

12. (Original) The article comprising a computer-readable medium of claim 10, wherein the second body of data is generated by subtracting a reconstructed body of data from a macroblock of the source video sequence.

13. (Original) The article comprising a computer-readable medium of claim 10, further including additional instructions causing the computer to:

compare the at least two separate reconstructed bodies of data to the source video sequence to adaptively select from the reconstructed first body of data, the reconstructed second body of data, or the combination of the reconstructed first and second bodies of data.

14. (Original) The article comprising a computer-readable medium of claim 10, wherein the selection of the reconstructed body of data is indicated in a syntax of a bit-stream transmitted from an encoder.

15. (Original) The article comprising a computer-readable medium of claim 10, wherein a first set of motion vectors are used to generate the first body of data and the first set of motion vectors are used to generate the second body of data.

16. (Original) The article comprising a computer-readable medium of claim 10, wherein the first body of data and the second body of data are generated by a single hardware component.

17. (Previously Presented) A system comprising:
a first unit to generate a first body of data being sufficient to permit generation of a viewable video sequence of lesser quality than is represented by a source video sequence;
a second unit to generate a second body of data being sufficient to enhance the quality of the viewable video sequence generated from the first body of data, the second body of data being generated by subtracting a reconstructed body of data from a subsection of the source video sequence, wherein the reconstructed body of data is selected from a group of at least two separate reconstructed bodies of data, and wherein the second body of data includes an enhancement layer that captures differences between the viewable video sequence and the source video sequence; and
a third unit to predict a subsection of the enhancement layer according to a prediction mode of a plurality of prediction modes, the plurality of prediction modes including prediction using the source video sequence and a combination of a previous enhancement frame and the first body of data.

18. (Original) The system of claim 17, wherein the group of at least two separate reconstructed bodies of data is selected from a reconstructed first body of data sufficient to permit generation of the viewable video sequence of lesser quality than is represented by the source video sequence, a reconstructed second body of data sufficient to enhance the quality of the viewable video sequence generated from the first body of data, or a combination of the reconstructed first and second bodies of data.

19. (Previously Presented) The system of claim 18, wherein prior to the second unit generating the second body of data generated by subtracting the reconstructed body of data from the subsection of the source video sequence, spatially reconstructing and clipping the reconstructed first body of data, and the second unit spatially reconstructing and clipping the reconstructed second body of data.

20. (Original) The system of claim 18, wherein the second body of data is generated by subtracting a reconstructed body of data from a macroblock of the source video sequence.

21. (Original) The system of claim 18, wherein the second unit compares the at least two separate reconstructed bodies of data to the source video sequence to adaptively select from the reconstructed first body of data, the reconstructed second body of data, or the combination of the reconstructed first and second bodies of data.

22. (Original) The system of claim 18, wherein the selection of the reconstructed body of data is indicated in a syntax of a bit-stream transmitted from the system.

23. (Original) The system of claim 18, wherein a first set of motion vectors are used by the first unit to generate the first body of data and the first set of motion vectors are used by the second unit to generate the second body of data.

24. (Original) The system of claim 18, wherein the first unit and the second unit are included on a single hardware component.

25. (Withdrawn) A method comprising:
encoding a source video sequence, wherein encoding the source video sequence includes generating a base layer bitstream; and
generating a plurality of enhancement layer bitstreams,
wherein the plurality of enhancement layer bitstreams capture differences between the source video sequence and the base layer bitstream, and
wherein generating a base layer bitstream comprises

predicting a source video frame of the source video sequence using a previous base layer frame of the base layer bitstream and a previous enhancement layer frame of an enhancement layer bitstream of the plurality of enhancement layer bitstreams.

26. (Withdrawn) The method of claim 25, wherein the plurality of enhancement layers are a plurality of bitslices of the differences between the source video sequence.